APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,608	06/27/2003	Andrew S. Becher	EMC03-03(03035)	2238

		EXAMINER
7590 12/04/2006		TECKLU, ISAAC TUKU

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ART UNIT	PAPER NUMBER
2192	

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/608,608	BECHER ET AL.
	Examiner	Art Unit	
	Isaac T. Tecklu	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>27 June 2003</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-28</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-28</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to the application filed on 06/27/2003.

2.   Claims 1-28 have been examined.

Oath/Declaration

3.   The office acknowledges receipt of a properly signed oath/declaration filed on 06/27/2003.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5.   Claims 1-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 14, 27 and 28 recite the limitation "the management server" in line 7, 14, 14, 9 of each claim. There is insufficient antecedent basis for this limitation in the claim.

Claims 2-13 and 15-26 are rejected for dependency upon rejected base claim 1 and 14 respectively.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-28 are rejected under 35 U.S.C. 102(a) as being anticipated by Hunt et al. (US 6,539,422 B1).

Per claim 1, Hunt discloses in a computerized device, a method for administering software storage area network management modules that operate as part of a storage area network management software application (e.g. FIG. 1 and related text and in abstract "... for controlling a plurality of automatic data collection device ..."), the method comprising the steps of:

operating a module server (e.g. FIG. 13, element 510 and related text) to service a plurality of different storage area network management modules that each provide a respective type of management functionality for elements operating within a storage area network (col. 4: 13-20 "... management functions to a remote ...") associated with the computerized device (e.g. FIG. 2, element 512, 101 and 102 and related text), the management sever lacking administration capability of the plurality of different storage area network management modules (e.g. FIG. 3, element 112 and related text);

operating an administration module in conjunction with the module sever (col. 4: 24-30 "... system management architecture ..."), the administration module providing a plurality of module administration interfaces that can be remotely invoked to administer the plurality of different storage area network management modules (col. 4: 24-30 "... interface and SNMP to communicate configuration and control requests to ADC device ...");

receiving a remote invocation of at least one of the plurality of module administration interfaces to remotely administer at least one of the storage area network management modules serviced by the module server (col. 9: 4-10 "... receive information ... RMI ..."); and

applying module administration functionality associated with the at least one remotely

invoked module administration interface to remotely administer (col. 11: 35-44 "... remote

system administrator ...") at least one of the storage area network management modules serviced

by the module server (e.g. FIG. 1, element 110 and related text).

Per claim 2, Hunt discloses the method of claim 1 wherein the plurality of module

administration interfaces include:

i) at least one installation interface having associated module administration

installation functionality allowing remote installation (col. 21; 15-20 "... application

installation utility ...") and removal of storage area network management modules operating in

the storage area network management application in the computerized device (col. 20: 38-45 "...

interfaces remove all ....");

ii) at least one activation control interface (e.g. FIG. 3, element 111 and related text) having

associated module administration activation control functionality allowing remote control of

operation of installed storage area network management modules operating in the storage area

network management application in the computerized device (e.g. FIG. 7, element 708 and

related text); and

iii) at least one description interface (e.g. FIG. 1, element 121 and related text) allowing

remote access to descriptive information related to the installed storage area network

management modules operating in conjunction with the module server in the storage area

network management application in the computerized device (e.g. FIG. 7, element 701 and

related text).

Per claim 3, Hunt discloses the method of claim 2 wherein receiving a remote invocation

of at least one of the plurality of module administration interfaces comprises:

receiving a deploy module interface call identifying (e.g. FIG. 10 " Run Application on

ADC ..."):

i) module metadata indicating operational attributes associated with a module to be

installed and deployed for operation with the module server (e.g. FIG. 10, element 1003 and

related text);

ii) a module file list identifying module files to be installed for operation of the

module to perform storage area network element management tasks associated with that module

(e.g. FIG. 10 , element 1005 and related text); and

wherein applying module administration functionality associated with the at least one

remotely invoked module administration interface comprises:

executing the module administration deployment functionality associated

with the deploy module interface call (e.g. FIG. 12, element 1219 and related text) to install

the module files identified in the module file list for runtime access by the storage area network

management application for operation with the module server (e.g. FIG. 12, element 1211-1209

and related text); and

configuring operational attributes indicated in the module metadata to allow the module

server to properly operate in conjunction with the installed storage area network management

module files to allow operation of the module to manage elements in the storage area network

(col. 18: 22-30 "... for configuring the ADC device ...").

Per claim 4, Hunt discloses the method of claim 3 wherein the operational attributes

indicated by the metadata include an activate on demand attribute that is set to indicate whether

that storage area network management module is to be activated for operation with the module

server on demand when a request for that module is received by the storage area network

management application (e.g. FIG. 6, element 604 and related text).

Per claim 5, Hunt discloses the method of claim 2 wherein receiving a remote invocation

of at least one of the plurality of module administration interfaces comprises:

receiving a remove module interface call to the at least one module installation interface,

the remove module interface call identifying at least one module to be removed from installation

and operation with the module server within the storage area network management application

(e.g. FIG. 6, element 602 and related text); and

wherein applying module administration functionality associated with the at least

one remotely invoked module administration interface comprises:

determining if the module to be removed is currently installed for operation with the

module server (e.g. FIG. 7, element 702 and related text), and if so:

i)   removing the module from installation with the module server (col. 20: 38-45 "…

interfaces remove all …" e.g. FIG. 7, element 706 and related text); and

ii)   deleting files listed in a module file list, received when the module was installed (col.

20: 38-45 "… interfaces remove all …"), the module file list identifying module files to that

were installed for operation of the module to perform storage area network element management

tasks associated with that module (e.g. FIG. 7, element 708 and related text).

Per claim 6, Hunt discloses the method of claim 2 wherein receiving a remote invocation

of at least one of the plurality of module administration interfaces comprises:

receiving a deactivate module interface call to the at least one activation control

interface, the deactivate module interface call identifying at least one module to be

deactivated from operation with the module server within the storage area network

management application (e.g. FIG. 7, element 701 and related text); and

wherein applying module administration functionality associated with the at least one

remotely invoked module administration interface comprises:

determining if the module to be deactivated is currently active for operation with the

module server, and if so deactivating the module from operation with the module server.

Per claim 7, Hunt discloses the method of claim 2 wherein receiving a remote invocation

of at least one of the

plurality of module administration interfaces comprises:

receiving a disable on demand activation module interface call to the at least one

activation control interface (col. 9: 4-10 "… receive information … RMI …"), the disable on

demand activation module interface call identifying whether a module identified by the disable

on demand activation module interface call is to be deactivated from automatic operation with

the module server when that module is requested for service within the storage area network

management application (col. 20: 45-50 "… subsystem is deactivated …"); and

wherein applying module administration functionality associated with the at least one

remotely invoked module administration interface comprises:

disabling the ability of the module server to automatically load and dynamically link the

module identified by the disable on demand activation module interface call (col. 20: 45-50

"... subsystem is deactivated ...").

Per claim 8, Hunt discloses the method of claim 2 wherein receiving a remote invocation

of at least one of the plurality of module administration interfaces comprises:

receiving at least one description interface call to the at least one description interface, the at

least one description interface call requesting·remote access to descriptive information related to

at least one of the installed storage area network management modules operating in conjunction

with the module server in the storage area network management application in the computerized

device (col. 9: 4-10 "... receive information ... RMI ..."); and

wherein applying module administration functionality associated with the at least one

remotely invoked module administration interface comprises:

returning descriptive information related to at least one of the installed storage area

network management modules operating in conjunction with the module server in the storage

area network management application in the computerized device (e.g. FIG. 7, element 709

"Send remote backup OID" and related text).

Per claim 9, Hunt discloses the method of claim 8 wherein the at least one description

interface call is a module metadata list call requesting access to module metadata for at least one

installed module that operates in conjunction with the module server (col. 21; 15-20 "...

application installation utility ..."); and

wherein returning descriptive information comprises:

transmitting module metadata to a device that provided the at least one description

interface call, the module metadata indicating operational attributes associated with a module

deployed for operation with the module server (e.g. FIG. 7, element 712 and related text).

Per claim 10, Hunt discloses the method of claim 8 wherein the at least one description

interface call is a describe module call requesting a module descriptor associated with a module

that is installed to operate with the module server and that is identified by a module identification

specified in the describe module call (e.g. FIG. 8, element 801 and related text); and

wherein returning descriptive information comprises:

transmitting the module descriptor associated with the module identification, the module

descriptor providing a description of the module, a status of whether the module is enable for

activation upon startup of the module server, and a published name by which the module may be

accessed for storage area network element management functionality by an application providing

the describe module call (e.g. FIG. 8, element 804 and related text).

Per claim 11, Hunt discloses the method of claim 8 wherein the at least one description

interface call is a interoperable object reference call requesting access to at least one

interoperable object reference associated with at least one module that is installed to operate with

the module server and that is identified by a module identification specified in the interoperable

object reference call (e.g. FIG. 8, element 805 and related text); and wherein returning

descriptive information comprises:

transmitting the at least one interoperable object reference to an application that provided

the at least one interoperable object reference call, the at least one interoperable object reference

operating as an identification of the module for use by storage area network management

applications (e.g. FIG. 8, element 808 and related text).

Per claim 12, Hunt discloses the method of claim 2 wherein receiving a remote

invocation of at least one of the plurality of module administration interfaces comprises:

receiving a module container state interface call to the at least one activation

control interface, the module container state interface call identifying a module container state

that configures a container state associated with the module to become at least one of (e.g. FIG.

9, element 901 and related text):

i) a discarding state in which the module discards incoming storage area network

element management requests (e.g. FIG. 9, element 902 and related text);

ii) a non-discarding state in which the module processes incoming storage area network

element management requests for management of elements in a storage area network (e.g. FIG.

9, element 907 and related text); and

wherein applying module administration functionality associated with the at least one

remotely invoked module administration interface comprises:

configuring the container state associated with the module based on module container state

identified in the module container state interface call.

Per claim 13, Hunt discloses the method of claim 2 wherein receiving a remote

invocation of at least one of the

plurality of module administration interfaces comprises:

receiving a module service home identification call to the at least one activation

control interface, the module service home identification call identifying a module

installed for operation with the module server and identifying at least one storage area

network management console operating in a storage area network management computer system

with which the module is to operate under for receipt of storage area network element

management commands; and

wherein applying module administration functionality associated with the at least one

remotely invoked module administration interface comprises:

configuring the module service home identification associated with the module based on

module service home identification identified in the module service home identification interface

call such that the module communicates with the identified at least one storage area network

management console (col. 4: 24-30 "... interface and SNMP to communicate configuration and

control requests to ADC device ...").

Per claim 14, this is the device version of the claimed method discussed above (Claim 1),

wherein all claim limitations have been addressed and/or covered in cited areas as set forth

above. Thus, accordingly, these claims are also anticipated by Hunt.

Per claim 15, this is the device version of the claimed method discussed above (Claim 2),

wherein all claim limitations have been addressed and/or covered in cited areas as set forth

above. Thus, accordingly, these claims are also anticipated by Hunt.

Per claim 16, this is the device version of the claimed method discussed above (Claim 3), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Hunt.

Per claim 17, this is the device version of the claimed method discussed above (Claim 4), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Hunt.

Per claim 18, this is the device version of the claimed method discussed above (Claim 5), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Hunt.

Per claim 19, this is the device version of the claimed method discussed above (Claim 6), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Hunt.

Per claim 20, this is the device version of the claimed method discussed above (Claim 7), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Hunt.

Per claim 21, this is the device version of the claimed method discussed above (Claim 8), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Hunt.

Per claim 22, this is the device version of the claimed method discussed above (Claim 9), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Hunt.

Per claim 23, this is the device version of the claimed method discussed above (Claim 10), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Hunt.

Per claim 24, this is the device version of the claimed method discussed above (Claim 11), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Hunt.

Per claim 25, this is the device version of the claimed method discussed above (Claim 12), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Hunt.

Per claim 26, this is the device version of the claimed method discussed above (Claim 13), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Hunt.

Per claim 27, this is the device version of the claimed method discussed above (Claim 1), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Hunt.

Per claim 28, this is the program product version of the claimed method discussed above (Claim 1), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Hunt.
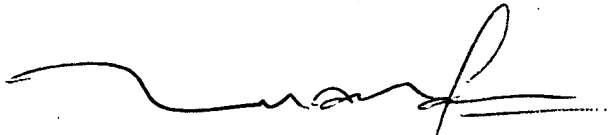
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac T. Tecklu whose telephone number is (571) 272-7957. The examiner can normally be reached on M-TH 9:300A - 8:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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